

ABSTRACT

The present systems and methods disclose a system for personalizing computer functionality. End-users are provided with tools to easily write rich and complex preferences, for example, by using a plurality simple IF-THEN propositional logic. The preferences are then transformed into queries and executed efficiently on structured data. Preferences that are satisfied then execute actions such as providing notification or storing data in a particular folder. Furthermore, according to an aspect of the invention, data, logic, events, *inter alia*, are all schematized, thereby enabling sharing of data between application components and across applications.